

CHAPTER 6

URBAN OPERATIONS

The first and most fundamental lesson learned from recent operations in built-up areas is the value of the fully integrated combined-arms team. There is no denying the value of infantry, armored, and antiarmor forces during urban combat. Urban operations (UO) never should be considered a purely infantry task. Infantry units operating alone suffer from critical shortcomings that can be overcome only by appropriate task organization with antiarmor capability to achieve a combined-arms effect. These forces must be supported by closely integrated antiarmor, armor, aviation, indirect fire support, communications, and logistical elements. Across the spectrum of operations in urban areas, the combined-arms team will produce the best results. Commanders at all levels must determine the composition of these combined-arms teams based on a careful METT-TC analysis.

Section I. GENERAL PLANNING CONSIDERATIONS

This section highlights the basic UO planning considerations for commanders of SBCT antiarmor companies and airborne and air assault infantry battalions *antiarmor* companies and, in the case of light infantry battalions, the antiarmor platoon leaders.

6-1. EMPLOYMENT CONSIDERATIONS FOR COMPANY-SIZE COMBINED-ARMS TEAMS

Because of the decentralized nature of urban combat and the need for a high number of troops to conduct operations in dense, complex terrain, infantrymen will always represent the bulk of forces. At the tactical level, infantry forces have disadvantages that can be overcome by mechanized infantry, antiarmor, or armor units. Conversely, vehicles face problems in the confines of urban areas that place them at a severe disadvantage when operating alone, unsupported by infantry. Only by working together can these forces accomplish their missions with minimal casualties while avoiding unnecessary collateral damage. (See Appendix E, TOW Employment in Restrictive Terrain.)

a. **Infantry Strengths.** The infantry has the following strengths in an urban environment.

(1) Infantry small-arms fire within a building can eliminate resistance without seriously damaging the structure.

(2) Infantrymen can move stealthily into position without alerting the enemy. Infantrymen can move over or around most urban terrain regardless of the amount of damage to buildings.

(3) Infantrymen have excellent all-round vision and can engage targets with small-arms fire under almost all conditions.

b. **Antiarmor System Strengths.** Antiarmor weapon systems in an urban environment have the following strengths.

(1) The thermal sights on the antiarmor weapon systems can detect enemy activity through darkness and most smoke.

(2) The precision direct fires of TOW and the destructive effects of the M2 and MK19 provide excellent support to infantry in an urban environment.

(3) Mounted patrols in all types of antiarmor vehicles (HMMWV or ICV) can monitor large areas of a city while making their presence known to the entire populace, both friendly and unfriendly.

(4) The mobile firepower of antiarmor vehicles can add security to resupply convoys.

(5) Antiarmor vehicles can resupply units quickly and with more ammunition than resupply by foot.

c. **Infantry Limitations.** Infantry forces have the following limitations in an urban environment.

(1) They lack heavy supporting firepower, protection, and long-range mobility.

(2) Exposed infantry forces are subject to taking a high number of casualties.

(3) Infantry forces are more subject to fratricide-related casualties from friendly direct and indirect fire.

d. **Antiarmor System Limitations.** Antiarmor forces have the following limitations in an urban environment.

(1) Antiarmor squads can be blinded easily by smoke or dust in the urban environment.

(2) If isolated or unsupported by infantry, antiarmor vehicles are vulnerable to enemy machine guns and light or medium antiarmor weapons.

(3) Antiarmor vehicle gunners cannot easily identify enemy targets in the confusing urban environment.

(4) Improvised barricades, narrow streets and alleyways, or large amounts of rubble can block antiarmor vehicles.

(5) Direct fires from antiarmor weapons systems (TOW, M2, and MK19) may cause unwanted collateral damage and can destabilize basic structures.

6-2. EMPLOYMENT OF ANTIARMOR VEHICLES

In most tactical situations antiarmor vehicles can be used effectively if they mass their fires. Antiarmor units operating in company and platoon strength combine mobility, firepower, and protection to seize the initiative from the enemy and aid friendly success. However, urban combat is often so decentralized and avenues of approach for vehicles so canalized that the urban situation requires that fewer antiarmor vehicles be employed over broader areas. The decision to disperse rather than concentrate antiarmor vehicles in a specific area should be made only after a careful consideration of the factors of METT-TC and the anticipated operations in the near future. Decentralized antiarmor support greatly increases a small infantry unit's combat power; however, dispersed antiarmor elements in UO cannot be easily and quickly massed to achieve an overwhelming effect on the enemy.

a. **Employment.** Antiarmor units can support infantry during UO by--

- Isolating objectives with direct fire (TOW, M2, and MK19) to prevent enemy withdrawal, reinforcement, or counterattack.
- Assisting infantry entering into buildings when enemy fire, debris, or obstacles block doorways.
- Securing portions of an objective by covering armored or mechanized avenues of approach.

- Attacking appropriate targets designated by infantry units.
- Establishing roadblocks or checkpoints.

b. **Task Organization at Brigade (SBCT) or Battalion Level.** The brigade (SBCT) and the airborne and air assault infantry battalion have an organic antiarmor company, and the light infantry battalion has an organic antiarmor platoon. There are three basic techniques of task-organizing the antiarmor for UO.

(1) ***Antiarmor Company (or Platoon) Retained under SBCT or Infantry Battalion Control.*** In this technique the antiarmor company commander (or platoon leader) is responsible for maneuvering his vehicles IAW the commander's intent. With this task organization, likely missions for the antiarmor unit are to support by fire or to overwatch movement of the infantry. This task organization poses the most difficulty in maneuvering the antiarmor unit with the dismounted infantry. However, it provides greater flexibility to the commander in supporting the infantry during the fight. The SBCT may also place the antiarmor company or a platoon under operational control (OPCON) of an infantry battalion or to the reconnaissance, surveillance, and target acquisition (RSTA) squadron.

(2) ***Antiarmor Platoon(s) under Each Infantry Company.*** The antiarmor platoons are placed under OPCON of an infantry company. With this technique the maneuver infantry companies have an antiarmor platoon available to support the UO fight and to deploy at the critical place and time. This task organization still allows for support to the infantry while keeping additional support options available for the company commander to employ. The light infantry battalion may OPCON the antiarmor platoon to a single infantry company for much the same reason as above. The battalion may also OPCON the antiarmor sections to the infantry companies.

(3) ***Individual Antiarmor Squads or Sections under Infantry Platoon Control.*** In this technique an antiarmor squad or section may be under the OPCON of an infantry or reconnaissance platoon. The purpose of this type of task organization (based on a detailed analysis of the factors of METT-TC) is to provide selected platoons with increased direct fire in an urban area. Leaders must ensure that the platoon secures the antiarmor squad or section at all times.

(4) ***Selection of a Technique.*** None of the techniques described above are inherently better than another. The task organization must be tailored to accomplish the mission. Regardless of the technique selected, the following guidelines apply:

- Antiarmor sections may operate in support of infantry. It is preferable, however, for antiarmor units to support each other.
- If using antiarmor vehicles (ICVs or HMMWVs) to support infantry squads and fire teams moving from building to building as part of the maneuver plan, the leader of the forward infantry element must control the movement of these antiarmor vehicles.
- When controlling an antiarmor platoon or section, an infantry company commander (or antiarmor company commander) should move forward to a position where he can personally maneuver it effectively in support of the infantry.
- A task organization should not exceed the leader's span of control (two to five subordinate units). If a company commander intends to personally control the

antiarmor unit, then he must not task-organize it to one of his infantry platoons.

- Antiarmor sections or squads need infantry support when the two elements are working together. Do not leave vehicles (ICVs or HMMWVs) alone. These sections or squads are ill prepared to provide their own security during UO. Individual vehicles are extremely vulnerable to dismounted attack when operating in a complex urban environment.

c. **Mutual Support.** Infantry and antiarmor forces work together to bring the maximum combat power available to bear on the enemy. Infantry forces provide the eyes and ears, locating and identifying targets for the antiarmor units to engage. Infantry and antiarmor forces move along covered and concealed routes to assault enemy elements. Infantry forces provide protection from enemy infantry while antiarmor forces provide supporting direct fires (TOW, M2, and MK19) against enemy fortifications and vehicles.

d. **Movement.** Infantry elements normally lead the movement through built-up areas. The antiarmor unit follows closely behind and provides close direct fire support. If the infantry discovers an enemy fortification or vehicle, the antiarmor unit responds immediately with direct fire to destroy, fix, or suppress the enemy, allowing the infantry unit to develop the situation. After allowing sufficient time to develop the situation or conduct short-range reconnaissance, the infantry leader directs the antiarmor unit to move, if necessary, and identifies specific targets to engage.

e. **Coordination.** Coordination between antiarmor and infantry leaders must be close and continuous. The antiarmor vehicle commander (platoon leader, section leader, or squad leader) may need to dismount the vehicle and move, accompanied by the infantry leader, to a position where he can see the route or target better. All involved must understand the signals for initiating, shifting, lifting, or ceasing direct fires. The greatest barrier to close coordination and command and control in UO is the intense noise and complexity of situations. Verbal commands must be backed up by simple, nonverbal signals.

f. **Communications.** Antiarmor leaders must maintain communications with the infantry commander. Individual antiarmor squads and infantrymen communicate with one another using one or more of the following techniques.

(1) **Visual Signals.** Visual signals, either prescribed by an SOP or coordinated during linkup, can facilitate some simple communications.

(2) **FM Radios.** FM radios provide a reliable means of communications between infantry and close supporting antiarmor units. These radios allow the infantry to use terrain more effectively to provide close-in protection for the antiarmor unit. Infantrymen can observe enemy elements while limiting exposure to enemy fires directed against the antiarmor unit. Signal operating instructions (SOI) information can be used between the antiarmor unit and the infantry unit headquarters. This is a fast and reliable method of communications that does not require additional assets. However, some urban environments can severely degrade FM radio communications over long distances or between forces that are inside and outside buildings. All leaders (antiarmor and infantry) must take this possibility into careful consideration during their thorough analyses of the factors of METT-TC.

NOTE: The infantry company commander relies on the radio to help control the battle. It is essential that platoon leaders and radiotelephone operators (RATELOs) be well trained in sending reports. Timely, accurate, and complete reporting from the subordinate elements to the commander is critical for mission success.

(3) **External Phone (SBCT only).** All antiarmor ICVs have external phones that aid in the communication between the antiarmor squad and the infantry.

g. **Smoke.** The use of smoke must be carefully coordinated. Although antiarmor weapon system sights can see through most obscurants, controlling antiarmor and infantry forces becomes significantly more difficult when these forces are enveloped in dense smoke clouds.

h. **Direct Fire Support.** Antiarmor weapon systems are valuable tools for helping assaulting forces isolate the objective area and secure a foothold. As the infantry force then moves to clear the built-up area, the antiarmor unit remains in its initial support-by-fire position. When possible, the antiarmor unit should move to a subsequent position where its direct fires can prevent enemy armor or mechanized reinforcement from attacking the objective and can engage those enemy forces withdrawing from the objective. At this time, the antiarmor unit must be very alert. Because of the nonlinear nature of UO, enemy forces may move to the rear or flanks of the now-isolated antiarmor vehicles and destroy them. If a small element of infantry cannot be spared to support the antiarmor unit, then vehicles (HMMWV or ICV) should move to positions of cover and concealment and mutual support. Antiarmor soldiers should be alert, especially for enemy infantry approaching from above, from the rear, or from the flanks.

i. **Other Considerations.** The following considerations also apply during UO.

(1) Identify available terrain during planning that will support antiarmor vehicle cross-country movement. While the rate of march may be slower, security may be significantly enhanced.

(2) Involve antiarmor leaders in the mission analysis. Their expertise will hasten the understanding of what antiarmor units can and cannot do and will aid the infantry commander in making the best employment decision.

(3) Urban operations are resource intensive. Antiarmor vehicles can carry ammunition, water, and other supplies to support the urban fight.

(4) Commanders must specifically allocate time in the planning process for precombat inspections (PCIs) and precombat checks (PCCs) of the antiarmor unit (for example, the vehicles and required weapon systems).

(5) Conduct a rehearsal at the level where the antiarmor units are task-organized. Try to replicate conditions for mission execution during rehearsals (for example, day, limited visibility, civilians on the battlefield, host nation support, and ROE). Include the following:

- Graphic and fire control measures.
- Direct fire plans.
- Communications.
- Breach drills.
- Techniques for employing antiarmor vehicles and the infantry.

(6) To minimize casualties when moving outside or between buildings--

- Cover all possible threat locations with either observation or direct fire.
- Use smoke to set a screen to block enemy observation of friendly movement for those areas not possible to cover with observation or direct fire.
- Move antiarmor units forward to support infantry movement. Position the antiarmor units before the infantry continues moving.
- Preplan positions if possible, but devise a marking system and communication signals to designate “situation-dependent” positions to help maintain momentum. (For example, “The VS-17 panel on Building 2 means move to SBF 3.”)
- Antiarmor vehicles must move at the infantry’s rate of movement.

(7) Use simple, clearly understood graphic control measures. The following are particularly useful during UO (Figure 6-1):

- Phase lines.
- Number and lettering systems for buildings.
- Tentative support-by-fire positions.
- No-fire areas.

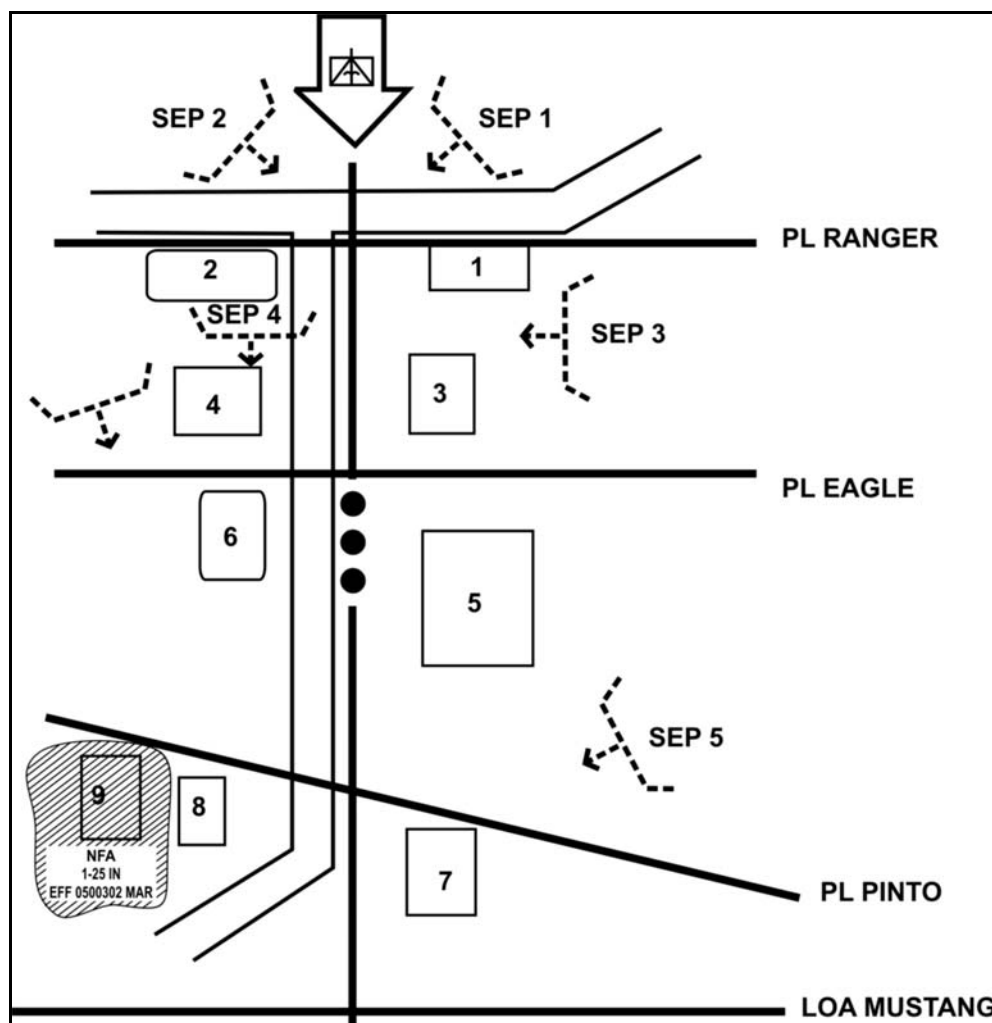


Figure 6-1. Graphic control measures.

Section II. OFFENSE

Offensive operations in urban areas are based on offensive doctrine modified to conform to the urban terrain. Urban combat imposes a number of demands that are different from ordinary field conditions, such as problems with troop requirements, maneuver, and use of equipment. As with all offensive operations, the antiarmor company commander (or platoon leader in the case of the light battalion) must retain his ability to support the infantry commander's intent on how he intends to fix (or suppress) and maneuver against enemy positions.

6-3. GENERAL OFFENSIVE CONSIDERATIONS

Combat operations in a built-up area have a slower tempo than operations in open terrain. Unlike in open terrain, infantry companies cannot maneuver platoons quickly. Due to the close environment and the restricted ability to use all available weapons systems, synchronization of all assets is one of the infantry commander's (or antiarmor leader's) main challenges. Missions in UO are more methodical. Antiarmor units normally conduct missions as part of a higher unit's operation, but they must be prepared to operate independently with infantry providing a degree of security. An antiarmor company also must be prepared to conduct different but mutually supporting missions simultaneously, such as establish a checkpoint and an observation point at the same time.

a. **Troop Requirements.** The nature of combat in built-up areas requires more troops than are normally needed in other combat situations. This is directly related to the effects of terrain and to the numerous tasks required: clear buildings, provide security, control civilians, and evacuate casualties (the probability of casualties is greater in UO).

(1) Additional forces may be needed to control civilians in the built-up area. These forces must protect civilians, provide first aid, and prevent them from interfering with the tactical plan.

(2) Fighting in a built-up area normally results in a greater number of friendly casualties. The ability to see the enemy is fleeting and confined to very short ranges compared to combat in unrestricted or restricted terrain. Fratricide can become a serious problem and must be addressed in detail (refer to Appendix B). Leaders must plan for CASEVAC and designate subordinate units to conduct this task.

b. **Maneuver.** Unlike in unrestricted terrain, the complex nature of the urban environment makes it difficult for antiarmor leaders to maneuver their elements and any attachments quickly. Supporting infantry units as they clear buildings and looking for ambushes, snipers, and booby traps degrades the ability of antiarmor leaders to maneuver their subordinate elements. The urban environment degrades the effects of many of the antiarmor weapon systems. It also makes synchronizing combat power a challenge. Offensive operations must be planned in detail, with subordinate antiarmor elements given specific instructions and on-order missions.

c. **Limitations.** When infantry commanders are attacking a built-up area, leaders must recognize some important limitations in the use of available assets.

(1) Normally, the use of indirect fires, especially field artillery, is much more restricted in built-up areas than in open terrain. Commanders must consider the effects of the indirect fire on the urban area and on civilians. This is especially true when extremely restrictive ROE are in effect. When indirect fires are authorized, they must be fired in greater mass to achieve the desired effect.

(2) Rubbling caused by indirect fires adversely affects a unit's ability to maneuver during the attack and may mask the direct-fire weapon systems available to a unit.

(3) Commanders and leaders must consider the effect that city lights, fires, and background illumination have on night vision devices. These elements may limit the effectiveness of NVDs and even make thermal imagery identification difficult.

(4) Communications equipment may not function to its maximum effectiveness because of dense building construction. Intelligent use of graphic control measures and a complete understanding of the commander's intent (two levels up) become even more important to mission accomplishment.

6-4. METT-TC FACTORS

The analysis of the factors of METT-TC is critical for successful planning and execution during UO.

a. **Mission.** The company commander (or platoon leader) must receive, analyze, and understand the mission before he begins planning. The conditions of the operation--either precision or high intensity--and the ROE must be clearly understood and stated. As stated earlier, an antiarmor company commander may be required to conduct different missions simultaneously.

(1) **Common Missions.** Antiarmor units should expect to receive the same type of offensive missions in urban terrain that they receive in other terrain. The following are common missions in UO.

(a) *Isolation of an Urban Objective.* The antiarmor unit normally conducts this mission as part of a battalion. An antiarmor company deploys its platoons to secure the area in order to destroy or fix any withdrawing enemy armor forces and to prevent armor or mechanized reinforcement of a counterattack against the objective.

(b) *Seizure of Key Urban Terrain.* Infantry companies may seize key terrain in order to provide an advantage to friendly forces. Antiarmor platoons (or sections) under OPCON of these companies are critical in isolating these areas and preventing enemy armor or mechanized elements from escaping or entering these areas. Key terrain may be overpasses, building complexes, traffic circles, surrounding natural terrain or bridges, and so forth.

(2) **Analysis of Mission.** When conducting his analysis, the company commander (or platoon leader) must consider his higher commander's intent and the end state of the operation. He must also consider how and where the unit must be postured in order to conduct follow-on missions and to facilitate the battalion and brigade missions. This influences the missions he gives to his subordinate unit (and attached element) leaders.

(3) **Coordination of Fire Support.** Most fire support coordination occurs at battalion level to take into account the ROE. Prior coordination determines the techniques and procedures to use for communicating, identifying targets, and shifting fires. The battalion must plan fires consistent with the ROE, giving extra consideration to civilians, houses of worship, medical centers, schools, public services, and historical monuments.

b. **Enemy.** Key factors that affect the leader's analysis are the type of enemy force that is expected in the urban area, their probable courses of action, and the ROE. More restrictive ROE work to a defender's advantage; conversely, less restrictive ROE work to an attacker's advantage. The type of threat is one factor used to determine how the company should be task-organized and how combat power should be synchronized to

accomplish the mission. Additionally, the company commander (or platoon leader) must determine if there are any unconventional (asymmetric) threats that may affect the unit's mission. For example, if an antiarmor company has the mission to safeguard (secure) a water treatment facility that is determined to be key terrain, the commander needs to consider possible threats to the facility that may not be direct force-on-force actions.

(1) **Conventional Forces.** Many third world countries have adopted techniques of urban combat from either the United States or the Commonwealth of Independent States. Therefore, a future threat may consider the motorized or mechanized rifle battalion the most effective unit for urban combat because of its inherent mobility, armor protection, and ability to adapt buildings and other structures for defense quickly.

(a) In countries that have forces equipped and trained, such as in the former Warsaw Pact, there are standard urban defenses:

- Threat defenses are organized into two echelons to provide greater depth and reserves.
- Company strongpoints are prepared and form the basis for the battalion defensive position.
- The reserve is located in a separate strongpoint.
- Ambush locations are established in the gaps of the strongpoints, and dummy strongpoints are constructed to deceive the attacker.
- Positions for securing and defending the entrances to and exits from underground structures and routes are established.
- Security positions are prepared forward of first echelon defensive positions.
- A motorized or mechanized rifle company may defend several buildings with mutually supporting fires or a single large building.
- Each platoon defends one or two buildings or one or two floors of a single building.

(b) In many third world countries, the forces are predominantly light with some outdated, yet effective, armored vehicles. Some countries may not have actual armed forces but have some form of armed militia(s). These forces normally do not fight a defense in the former Warsaw Pact style, but rather offer uncoordinated resistance, often extremely intense, as experienced in Somalia.

(2) **Unconventional (Asymmetric) Forces.** Enemy analysis is similar to that for urban counterinsurgency, counter guerrilla, and counterterrorist operations.

c. **Terrain.** Offensive operations must be tailored to the urban environment based on a detailed analysis of each urban terrain setting, its types of built-up areas, and existing structural forms. Commanders and subordinate leaders must incorporate the following special planning considerations for an urban environment when conducting an offensive operation:

- Military maps that may not provide enough detail for urban terrain analysis nor reflect the underground sewer system, subways, underground water system, mass transit routes, and utility facilities. (When available, the commander should utilize building or city plans, engineering prints, aerial photographs, tourist maps, or other aids that may assist him in his analysis of the terrain.)
- Natural terrain surrounding the built-up area.

- Key and decisive terrain (stadiums, parks, sports fields, school playgrounds, public buildings, media facilities, and industrial facilities).
- Construction and structural composition of buildings.
- Confined spaces that limit observation, fields of fire, and maneuver and prevent the concentration of fires at critical points.
- Covered and concealed routes to and within the built-up area.
- Limited ability to employ maximum combat power due to the need to minimize damage and rubble effects (based on ROE).
- Problems with conducting effective reconnaissance during conventional operations. (Reconnaissance by force is the most effective reconnaissance means, ROE permitting. This method involves probing a defense with successively larger units until enemy positions are disclosed and can be successfully attacked. During unconventional (asymmetric) operations or operations under restrictive ROE, the opposite is true. Reconnaissance and security are more easily accomplished by both sides and are more difficult to prevent.)
- ROE that limit the use of firepower.
- Significant numbers of civilians who may have to be evacuated, some forcibly. Civilians may hinder operations deliberately or merely by their presence.

d. **Troops Available.** Infantry companies normally participate in an attack as part of an attacking battalion. In this case, the antiarmor unit supports by isolating the objective or places subordinate units under OPCON to the infantry. In some circumstances, antiarmor companies may have infantry attached to participate in the attack within the built-up area.

e. **Time.** Offensive operations in built-up areas have a slower operational tempo than other offensive operations. Leaders must consider the following issues when analyzing time available for a UO attack:

(1) Clearing and isolating blocks or axes of advance in the dense environment of urban terrain requires more time than do operations in more open terrain.

(2) Troops tire more quickly because of stress and the additional physical exertion related to clearing urban terrain. Plan additional time to recover from fatigue.

(3) Allow additional time for thorough reconnaissance and rehearsals in order to prevent excessive casualties and fratricide.

f. **Civil Considerations.** Enforcing the ROE is critical. Leaders must incorporate plans to evacuate civilians into the plan. Leaders must also limit the collateral damage (as dictated in the ROE). Undamaged infrastructures are of great use to antiarmor units.

6-5. BATTLE COMMAND

Units in built-up areas frequently fight separated and isolated from one another (noncontiguous areas of operation). Planning is centralized, but execution is decentralized. In all situations, leaders should position themselves well forward so that they can control the action and provide assistance to subordinate leaders. In urban terrain, this is even more critical due to obstacles, poor visibility, difficulty in communications, and the intensity of urban combat. Leaders must demand timely, accurate, and complete

reporting and must plan for effective command and control to lessen the effects of the urban environment.

a. **Command.** Subordinate units require mission orders that are restrictive in nature. Antiarmor commanders (and platoon leaders) should use detailed control measures to facilitate decentralized execution. Increased difficulties in command, control, and communications from higher headquarters demand increased responsibility and initiative from subordinate leaders. Graphic control measures common to other tactical environments are also used in combat in built-up areas. These and other control measures ensure coordination throughout the chain of command.

b. **Control.** Thorough rehearsals and detailed briefbacks also enhance control. It is important that antiarmor subordinate leaders clearly understand the commander's intent (two levels up) and desired mission end state in order to facilitate control.

(1) **Establish Communications.** In built-up areas, radio communications are often less effective than field telephones and messengers. Communications equipment may not function properly because of the materials used in the construction of buildings and the environment. Wire laid at street level is easily damaged by rubble and vehicle traffic. Pyrotechnic signals are hard to see because of buildings and smoke. The high noise level of battles within and around buildings makes sound signals and voice alerts difficult to hear, and voice communication can also signal the unit's intention and location to the enemy. Line-of-sight limitations affect both visual and radio communications. Therefore, the time needed to establish an effective communications system might be greater in an urban environment. Leaders should consider these effects when they allocate time to establish communications. Since the effectiveness of normally dependable communications may be uncertain during UO, units may fight without continuous communications. Unit SOPs become significantly more important in the urban environment.

(2) **Graphic Control Measures.** The use of graphic control measures to augment the understanding of the commander's intent two levels up by all leaders becomes even more important to successful mission accomplishment in an urban environment. Leaders can use phase lines to report progress or to control the advance of attacking units and limits of advance to prevent fratricide.

(a) When attacking to seize a foothold, the infantry company commander normally assigns a building or a few small buildings as a platoon's first objective. When an objective extends to a street, only the near side of the street is included in the objective area. The company's final objective may be buildings at the far edge of the built-up area or key terrain on the far side. Key buildings or groups of buildings may also be assigned as intermediate objectives. To simplify assigning objectives and reporting, all buildings along the route of attack should be identified (by SOP). Figure 6-2, page 6-12, is an example of using numbers for identification.

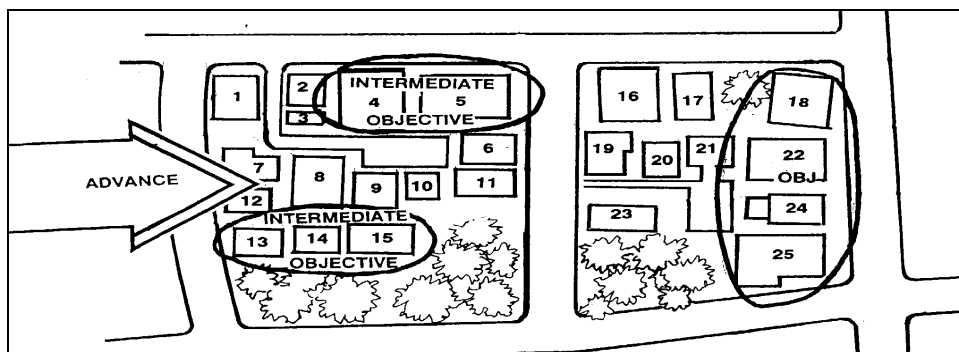


Figure 6-2. Example of a numbering system.

(b) When the company is involved in clearing a designated area of operation, bypassing buildings increases the risk of attack from the rear or flank. Thus, the clearing unit must enter, search, and clear each building in its area of operation or have the antiarmor elements isolate it by fire or other means. A single building may be an objective for a rifle squad or, if the building is large, for a rifle platoon or even a company. When the infantry commander's concept is based on speed or when conducting a hasty attack, a company may be directed not to clear throughout its entire area of operation.

(c) Phase lines can be used to report progress or to control the advance of attacking units (Figure 6-3). Principal streets, rivers, and railroad lines are suitable phase lines, which should be on the near side of the street or open area. In systematic clearing, an antiarmor unit may have the mission to secure the area of operation for the infantry units up to a phase line. In that case, the antiarmor unit leader chooses his own objectives when assigning missions to his subordinate units.

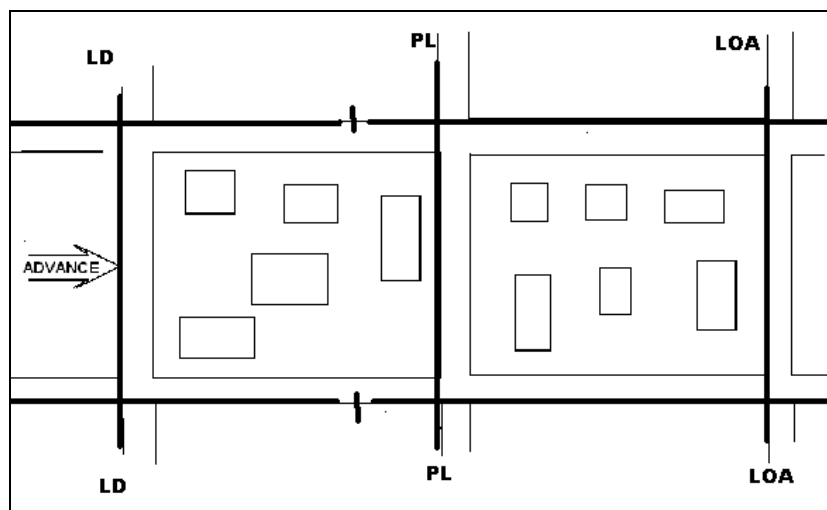


Figure 6-3. Boundaries and phase lines.

(d) The unit leader sets unit boundaries within blocks so that a street is included in a unit's AO. Place boundaries to ensure both sides of a street are within one unit's AO.

(e) The unit leader considers the factors of METT-TC and plans checkpoints and contact points at street corners, buildings, railway crossings, bridges, or any other easily identifiable urban feature.

(f) Forward units may occupy an attack position for last-minute preparation and coordination. The attack position is often behind or inside the last covered and concealed position, such as a large building, before crossing the line of departure. The LD should be the near side of a linear terrain features, such as a street or rail line.

6-6. MOVEMENT

A unit moving in built-up areas follows the same fundamentals and principles and uses the same movement techniques as in other areas. Enemy actions against an antiarmor unit might consist of ambushes on the street, enfilade fire down the streets, sniper fire, fire from rooftops and from within buildings, or artillery or mortar fire. The unit can minimize the effects of enemy defensive fires during movement by--

- Using covered routes.
- Moving only after defensive fires have been suppressed or obscured.
- Moving at night or during other periods of limited visibility.
- Selecting routes that will not mask friendly suppressive fires.
- Crossing open areas (streets and spaces between buildings) quickly under the concealment of smoke with suppression provided by support forces.
- Using the concealment provided by shaded areas.
- Creating deceptions.
- Suppressing known or suspected enemy positions, as allowed by ROE.

a. **Speed of Movement.** As in all urban situations, units must search for defenders in 360 degrees and in all three dimensions. The speed of movement depends on the type of operation, terrain, and degree of enemy resistance. As in any other terrain, the faster the speed of movement the lesser the degree of security and the slower the speed the more secure the movement. In lightly defended areas, the mission or the requirement for speed may dictate moving through the streets and alleys in order to reach and secure key terrain. More importantly, the higher commander must establish and enforce the tempo of the operation.

b. **Danger Areas.** As in any other type of terrain, danger areas should be avoided if possible. Unlike other terrain, almost everything is a danger area in urban terrain. Types of urban danger areas include, but are not limited to--

- Open areas.
- Parking lots and garages.
- Intersections.
- Streets, alleys, and roadways.
- Traffic circles and cul-de-sacs.
- Bridges, overpasses, and underpasses.
- Subterranean areas.
- Rooftops.

6-7. ISOLATE AN URBAN OBJECTIVE

Antiarmor companies (or platoons) routinely support in the isolation of urban objectives in order to prevent reinforcement of or counterattack against the objective and to destroy or capture any withdrawing enemy mobile forces. When planning the isolation, leaders must be aware of the considerations involved in the three-dimensional and in-depth isolation of the objective (front, flanks, rear, upper stories, basements and rooftops). All available direct and indirect fire weapons should be employed, consistent with the ROE. Isolating the objective is a key factor in facilitating the assault and preventing casualties. The antiarmor company (or platoon) may perform this mission as the support element for a battalion operation, or it may assign the task to one of its subordinate units during an infantry battalion attack operation. In certain situations, antiarmor units may be required to isolate an objective or an area for special operations forces.

a. **Isolating the Objective (Infantry Battalion Attack).** An antiarmor company (or platoon) may isolate the objective as a support element for a battalion operation. When an antiarmor company has this mission, the battalion's objective is normally a larger structure or group of blocks. The company commander tasks his platoons and assigns them to support-by-fire positions based on an analysis of the factors of METT-TC. In addition to isolating the objective, an antiarmor company may have additional tasks to conduct on order or simultaneously. Examples of these additional tasks include providing the battalion reserve, handling civilians and EPWs, and performing medical evacuation (MEDEVAC).

b. **Isolating the Objective (Infantry Company Attack).** When an infantry company conducts an attack, the task organization and tasks given to an antiarmor platoon (or section) are determined by an analysis of the factors of METT-TC. If the infantry company conducts a company attack, the objective can be a building, a block, a traffic circle, or a village (Figure 6-4). See Figure 6-5 for a technique of controlling direct fires during the assault.

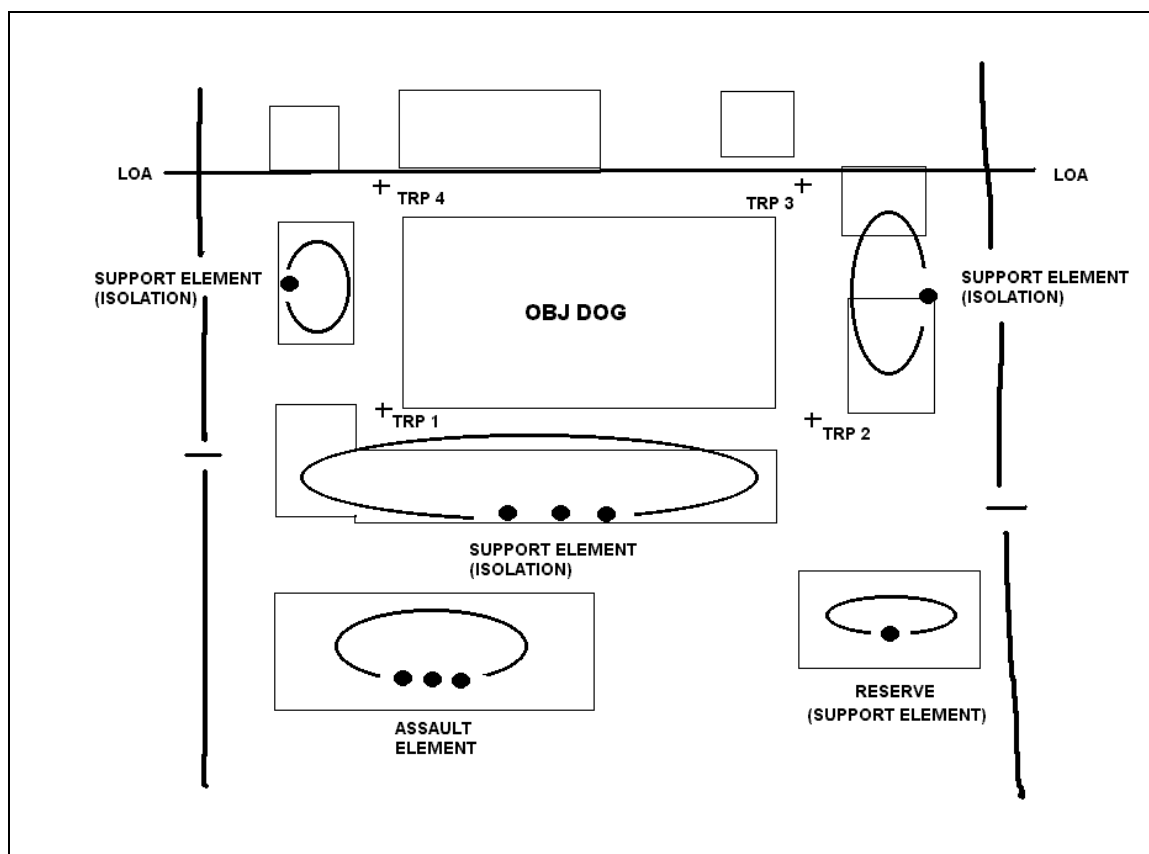


Figure 6-4. Isolating an urban objective.

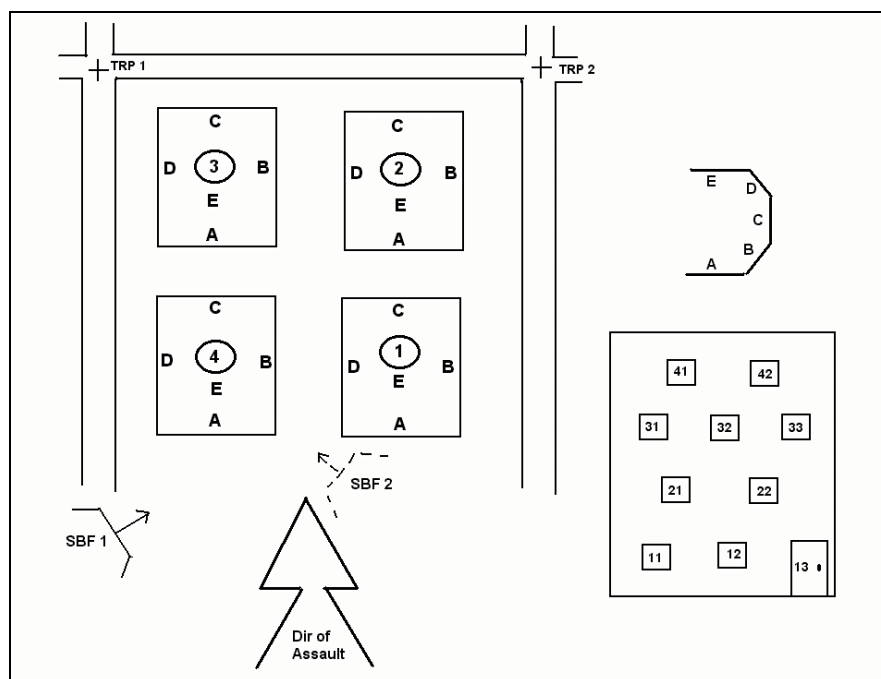


Figure 6-5. Direction of assault technique for direct fire planning and control.

6-8. ATTACK A BLOCK OR GROUP OF BUILDINGS

An infantry company normally attacks a block or group of buildings as part of a battalion attack. To attack a block or group of buildings, an infantry company likely will be reinforced with an antiarmor platoon (or section) and possibly engineers, mobile gun systems (MGS), Bradley fighting vehicles (BFVs), or tanks, consistent with the ROE and the enemy situation.

a. **Execution.** The execution of this mission is characterized by infantry platoon attacks supported by both antiarmor and infantry direct fires and indirect fires. Success depends on isolating enemy positions (which often become platoon objectives), suppressing enemy weapons, seizing a foothold in the block, and clearing the buildings room by room.

b. **Direct Fire Weapons.** Direct fire support weapon systems fire on the objective from covered positions, consistent with the ROE. These weapons should not be fired for prolonged periods from one position. Antiarmor squads, like other crew-served weapons crews, should use a series of positions and displace from one to another to gain better fields of fire and to avoid being targeted by the enemy. Direct fire support tasks can be assigned as follows:

- M240Bs fire along streets and into windows, doors, mouseholes, and other probable enemy positions. ROE may restrict firing only to known enemy locations.
- MK19s fire at targets protected by walls and provide protection against enemy vehicles, as required.
- M2s suppress enemy positions.
- Riflemen engage targets of opportunity.

6-9. CONSOLIDATION AND REORGANIZATION

Consolidation occurs immediately after each action. Consolidation provides security and allows a unit to prepare for counterattack. In an urban environment, it is extremely important that units consolidate rapidly after each engagement. After securing a floor, selected members of the assault force and antiarmor elements cover potential enemy counterattack routes to the building. Priority must be given to securing the direction of attack first. Reorganization is action taken that shifts internal resources within a degraded unit to increase its level of effectiveness. Given the resource-intensive environment during UO, it is important for units to plan for and conduct reorganization activities throughout the operation, as much as possible.

a. **Consolidation Actions.** Antiarmor elements assume hasty defensive positions after the objective has been seized or secured and prepare for possible enemy counterattacks. Based upon their specified and implied tasks, antiarmor elements should be prepared to occupy an overwatch position to support an assault on another building.

b. **Reorganization Actions.** Reorganization actions do not necessarily wait on the consolidation activities. These actions include the following:

- Resupply and redistribute ammunition and equipment.
- Refuel vehicles as necessary.
- Treat and evacuate wounded personnel.
- Treat and process EPWs.

- Segregate and safeguard civilians.
- Reestablish the chain of command.

Section III. DEFENSE

The two types of defense operations (area and mobile) still apply in UO. Of these two types, the mobile defense is more focused on the enemy. The commander may decide to use this type of defensive operation based on his analysis of the factors of METT-TC. The area defense is more appropriate when most of the reasons for defending a built-up area are focused on retaining terrain. In a built-up area, the defender must take advantage of inherent cover and concealment afforded by urban terrain. He must also consider restrictions to the attacker's ability to maneuver and observe. By using the terrain and fighting from prepared and mutually supporting positions, a defending force can delay, block, fix, or inflict heavy losses on a much larger attacking force. The defense of a built-up area should be organized around key terrain features, buildings, and areas that preserve the integrity of the defense and provide the defender ease of movement. The defender must organize and plan his defense by considering obstacles, avenues of approach, key terrain, observation and fields of fire, cover and concealment, fire hazards, and communications restrictions.

6-10. METT-TC FACTORS

Procedures and principles for planning and organizing the defense of a built-up area are the same as for other defensive operations. In developing a defensive plan, the defender considers the factors of METT-TC, emphasizing their impact on fire support, preparation time, work priorities, and control measures. Planning for the defense of a built-up area must be detailed and centralized. As in the offense, execution is decentralized as the battle develops and enemy forces assault buildings and rooms. Therefore, it is imperative that the company commander (or platoon leader) and his subordinate leaders understand the mission end state and the commanders' intent two levels up.

a. **Mission.** The commander (or platoon leader) must receive, analyze, and understand the mission before he begins planning. He may receive the mission as a FRAGO or formal OPORD, and he must analyze all specified and implied tasks. Depending on mission requirements, an antiarmor company must be prepared to defend independently or as part of a larger force. Antiarmor platoons in light infantry battalions will typically defend as part of a larger force. Mission planning is essentially the same for all defensive operations. A hasty defense may be conducted in any of the situations described below, immediately after offensive operations, or when a higher state of security is warranted during stability operations. The major difference lies in the amount of preparation and the ROE.

b. **Enemy.** The commander (or platoon leader) must also analyze the type of enemy force he may encounter. If the attacker is mostly armored or mounted motorized infantry, the greatest danger is that he will mass direct fire and destroy the defender's positions. If the attacker is mostly infantry or is employing asymmetric applications of combat power, such as guerrillas or terrorists, he will temporarily mass his combat power against the defender's perceived weakness, then quickly move away. This attacker will not stay and fight for long periods of time. Enemy analysis during defensive operations in built-up areas is not limited to only studying the enemy. Commanders must emphasize obtaining

and using all intelligence. The items of intelligence peculiar to combat in built-up areas include--

- Street, water, and sewer plans.
- Key installations and facilities.
- Key civilians.
- Civilian police and paramilitary forces.
- Communications facilities and plans.
- Power stations.

c. **Terrain.** Terrain in built-up areas is three-dimensional: ground level (streets and parks), above ground (buildings), and below ground (basements, subways and sewers). Analysis of all manmade and natural terrain features is critical when planning to defend a built-up area. The type of built-up area in which a unit will operate affects the defensive plan.

(1) **Villages.** Villages are often on choke points in valleys, dominating the only high-speed avenue of approach through the terrain. If the buildings in such a village are well constructed and provide good protection against both direct and indirect fires, a defense can be mounted by placing antiarmor elements in the town while controlling close and dominant terrain with other infantry elements. Commanders may use villages on approaches to large towns or cities to add depth to the defense or to secure the flanks. These villages often are characterized by clusters of houses and buildings (stone, brick, or concrete). Company-sized battle positions (three to four platoons) can be established in these small villages to block approaches into the main defensive positions.

(2) **Strip Areas.** Strip areas consist of houses, stores, and factories and are built along roads or down valleys between towns and villages. They afford the defender the same advantages as villages. If visibility is good and enough effective fields of fire are available, a unit acting as a security force need occupy only a few strong positions spread out within the strip. This will deceive the enemy, when engaged by antiarmor elements at long ranges, into thinking the strip is an extensive defensive line. Strip areas often afford covered avenues of withdrawal to the flanks once the attacking force is deployed and before the security force becomes decisively engaged.

(3) **Towns and Cities.** When facing a predominantly armored enemy, a small force can gain an advantage in combat power when defending a small city or town that is a choke point if it places antiarmor weapon systems (TOW, M2, or MK19) on positions dominating critical approaches. To deny the enemy the ability to bypass the town or city, the defending force must control key terrain and coordinate with adjacent forces. Reserve forces should be placed where they can quickly reinforce critical areas. Obstacles and minefields assist in slowing and canalizing the attacker.

(a) Finding positions in towns and cities that provide both good fields of fire and cover is often difficult. The forward edges of a town usually offer the best fields of fire but can be easily targeted by enemy overwatch and supporting fire. These areas often contain residential buildings constructed of light material. Factories, civic buildings, and other heavy structures, which provide adequate cover and are more suitable for defending, are more likely found deeper in the town. These locations will have limited fields of fire on the likely avenues of approach.

(b) Since the forward edge of a town is the obvious position for the defender, it should be avoided. However, the defender can set up his position there if the terrain

limits the enemy's ability for engagement or contains strongly constructed buildings that give defending units adequate protection.

(c) An antiarmor unit may initially be assigned battle positions on the forward edge of the town to provide early warning of the enemy's advance. The force engages the enemy at long range, typically with TOW missiles, and deceives the enemy as to the true location of the defense. This force should withdraw in time to avoid decisive engagement. If there is limited observation from the forward edge, a task organized force should be positioned on more favorable terrain forward or to the flanks of the town to gain better observation and to engage the enemy at long range.

(d) In a large built-up area, a company or battalion has a sector, battle position(s), or a strongpoint to defend. Although mutual support between positions should be maintained, built-up terrain often allows for infiltration routes that the enemy may use to pass between positions. Therefore, the defender must identify the following:

- Positions that enable him to place effective antiarmor direct fires on the infiltrating enemy (especially MK19 fires).
- Covered and concealed routes for friendly elements to move between positions (subways and sewers).
- Areas where antiarmor weapons have effective fields of fire, such as parks, boulevards, rivers, highways, and railroads.
- Command and control locations that offer cover, concealment, and ease of communications.
- Protected storage areas for supplies.

(4) **Obstacles.** A built-up area is itself an obstacle since it canalizes and impedes an attack. Likely avenues of approach should be blocked by obstacles (Figure 6-6, page 6-20) and covered by direct and indirect fire. Barriers and obstacles should be emplaced in three belts and consistent with the ROE.

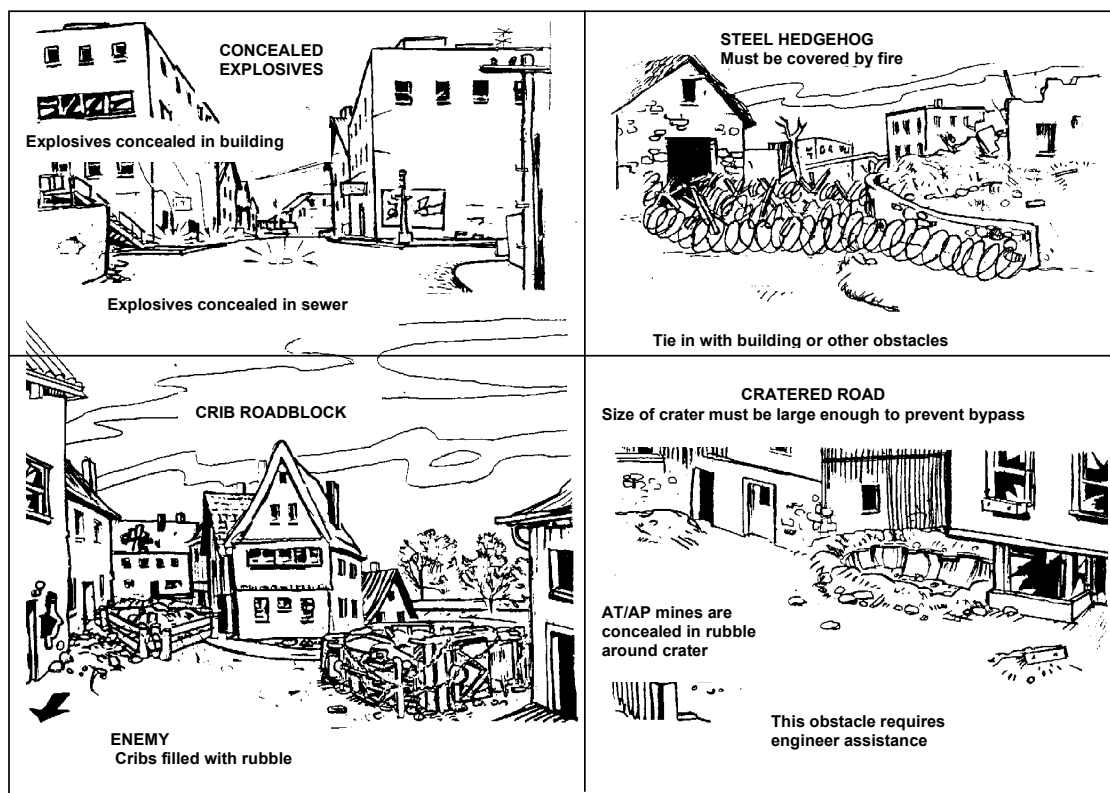


Figure 6-6. Example of urban obstacles.

(5) *Avenues of Approach.* The defender must consider not only the conventional avenues of approach into and out of the city but also the avenues above and below ground level within built-up areas. The defender normally has the advantage. He knows the built-up area and can move rapidly from position to position. Control of these avenues of approach becomes more critical when the defense of key terrain must be oriented against terrorism and sabotage. All avenues of approach (three-dimensionally) must be denied. When necessary, obstacles can be emplaced without mines and covered by fire within the parameters of the ROE.

(6) *Key Terrain.* Key terrain is any place where seizure, retention, or control affords a marked advantage to either combatant. Examples of key terrain during UO are bridges over canals or rivers, building complexes, public utilities or services, and parks. The population of a built-up area may also be considered key terrain. The identification of key terrain allows the defender to select his defensive positions and assists in determining the enemy's objectives.

(7) *Observation and Fields of Fire.* The defender must position weapon systems to obtain mutual supporting fire and maximum effect. This allows for long-range engagements out to the maximum effective ranges. Observers should be well above street level to adjust fires on the enemy at maximum range. Indirect fires, especially FPFs, should be preplanned and, if possible and ROE permitting, preregistered on the most likely approaches to allow them to be shifted rapidly to threatened areas.

d. **Troops Available.** Urban operations are manpower intensive.

(1) *Employment of Antiarmor Units.* Once the infantry commander has decided where to defend, he should integrate antiarmor elements into select battle positions or

sectors that block or restrict the enemy's ability to maneuver and control key areas. The frontage for an infantry platoon is about one to two city blocks long. Infantry platoons can occupy about three small structures or a larger two- to three-story building (Figure 6-7). Along with his primary and alternate positions, the infantry platoon leader normally selects one supplementary position to reorient his defense to meet enemy threats from another direction. Antiarmor companies (or platoons) may be tasked to detach a subordinate unit to be incorporated into the infantry battalion reserve.



Figure 6-7. Platoon battle positions in a company sector.

(2) ***Employment of Antiarmor Weapon Systems.*** The commander should employ antiarmor weapon systems to take advantage of their long-range fires and mobility. Some built-up areas may restrict the mobility of these vehicles and make them vulnerable to the enemy. Mutually supporting infantry should be positioned to provide security against close enemy direct fires and to identify targets for the antiarmor elements. Antiarmor elements should be assigned engagement areas in support of the defensive scheme of maneuver. The infantry unit's Javelins and AT4s should supplement the antiarmor unit's weapons systems. Antiarmor weapon systems may be--

- Positioned on the edge of the city in mutually supporting positions.
- Positioned on key terrain on the flanks of towns and villages.
- Used to cover barricades and obstacles by fire.
- Part of the reserve.

(3) **Employment of Fire Support.** Indirect fire planning must be comprehensive due to the proximity of buildings to targets, minimum range restrictions, repositioning requirements, and ROE. Mortar and artillery fires are planned on top of and immediately around defensive positions for close support.

(a) *Artillery.* Artillery may be used as direct or indirect support. Artillery fire should be used--

- To suppress or obscure enemy overwatch elements.
- To disrupt or destroy an assault.
- To provide counterbattery fire.
- To support counterattacks.
- To provide direct fire when necessary.

(b) *Final Protective Fires.* A final protective fire is planned to stop dismounted assaults in front of the defensive positions. Indirect fires within the city are planned along likely routes of advance to destroy the enemy as he attempts to deepen a penetration.

(c) *Priorities of Fire.* The company commander (or platoon leader) should establish priorities of fire based on enemy avenues of approach and enemy systems that present the greatest danger to the defense. For example, during the attacker's initial advance, tanks, armored personnel carriers, and overwatching elements are the greatest threat to the defense. TOWs, M2s, and Javelins should concentrate on destroying armored vehicles. In certain situations, enemy armored vehicles may provide a greater threat than enemy tanks in a built-up area; the armored vehicles carry infantry that can gain footholds in buildings. Mortar and artillery fires should suppress enemy ATGMs and overwatch positions or elements. If enemy formations secure a foothold, priority shifts to the destruction of the penetrating enemy forces.

(d) *Control of Supporting Fires.* As the attack progresses in the city, enemy indirect fires increase to separate infantry from supporting weapons (for example, antiarmor unit weapon systems). During this phase, friendly artillery concentrates on counterfire missions and the destruction of reinforcements that are approaching the city. Mortars continue to concentrate on infantry attacks.

(e) *Support of Counterattacks.* When initiated, counterattacks are given priority of supporting fires. When artillery is firing the missions mentioned above, it must remain mobile and be prepared to displace to preplanned positions to avoid enemy counterbattery fire.

(f) *Indirect Fire Planning.* At company and platoon level, indirect fire plans include fires of attached and supporting weapons. The company commander (or platoon leader) also plans mortar and artillery fires on and immediately around his battle positions for close support.

(g) *Air Defense Assets.* Air defense assets available to the commander, such as Stinger and Avenger, are normally employed to ensure all-round air defense. These assets are normally controlled at brigade (SBCT) or battalion level, but they may be placed under a company commander's control when METT-TC factors warrant that type of use. The lack of good firing positions for long-range air defense missile systems in the built-up area may limit the number of deployed weapons. In the defense, weapons systems may have to be winched or airlifted into positions. Stingers and Avengers can be assigned to protect specific positions or function in general support of the battalion.

(4) **Employment of the Reserve.** The commander's defensive plan must always consider the employment of a reserve. The reserve force should be prepared to counterattack to regain key positions, to block enemy penetrations, to protect the flanks, or to assist by fire in the disengagement and withdrawal of positions. For combat in a built-up area, a reserve force--

- Normally consists of infantry.
- Must be as mobile as possible.
- May be supported by an antiarmor unit.
- May be an antiarmor company with infantry attached.

e. **Time Available.** The commander must organize and establish priorities of work, depending upon the time available. Many tasks can be accomplished simultaneously, but priorities for preparation should be in accordance with the commander's order. A sample priority of work sequence is described in the following paragraphs.

(1) **Establish Security.** The unit should quickly establish all-round security by placing forces on likely avenues of approach. The factors of METT-TC determine the level of security (for example, 50 percent or 30 percent).

(2) **Assign Areas of Responsibility.** Boundaries define responsibility in terms of areas of operation or sectors. They include areas where units may fire and maneuver without interference or coordination with other units. Responsibility for primary avenues of approach should never be split. In areas of semi-detached construction where observation and movement are less restricted, boundaries should be established along alleys or streets to include both sides of a street in a single AO or sector. Where buildings present a solid front along streets, boundaries may have to extend to one side of the street. Battle positions also should be specifically assigned to platoons.

(3) **Clear Fields of Fire.** In built-up areas, defenders may need to rubble certain buildings and structures to provide greater protection and better fields of fire. Rubbling an entire building can increase the fields of fire and create an obstacle to enemy movement. Defenders must be careful, however. Rubbling buildings too soon or rubbling too many may give away exact locations and destroy cover from direct fire. Planning must be extensive so that rubble buildings will not interfere with planned routes of withdrawal or counterattack.

(4) **Select and Prepare Initial Fighting Positions.** The company commander (or platoon leader) should select positions in depth. The unit should start preparing positions as soon as possible and continue preparing as long as positions are occupied. Enemy infiltration or movement sometimes occurs between or behind friendly positions. Therefore, each position must be organized for all-round defense. The defender also should --

- Remove combustible material to limit the danger of fire. Fires are dangerous to defenders and create smoke that could conceal attacking troops. For these reasons, defenders should remove all flammable materials and stockpile firefighting equipment (such as water and sand). The danger of fire also influences the type of ammunition used in the defense. Tracers or incendiary rounds should not be used extensively if threat of fire exists.
- Turn off electricity and gas. Both propane and natural gas are explosive. Natural gas is also poisonous, displaces oxygen, and is not filtered by a protective mask. Propane gas, although not poisonous, is heavier than air. If it

leaks into an enclosed area, it displaces the oxygen and causes suffocation. Gas mains and electricity should be shut off at the facility that serves the urban area.

- Camouflage positions.
- Prepare range cards, fire plans, and sector sketches.
- Cache resupply of ammunition, water, and medical supplies.

(5) **Establish Communications.** When allocating time to establish communications, defenders should consider the effects of built-up areas. Line-of-sight limitations affect both visual and radio/digital communications. Wire laid at street level is easily damaged by rubble and vehicle traffic. The noise of combat in built-up areas is much louder than in other areas, making sound signals difficult to hear. Therefore, the time needed to establish an effective communications system in urban terrain may be greater than in other terrain.

(a) Use existing telephone systems. However, telephones are not secure even though many telephone cables are underground.

(b) Use messengers at all levels since they are the most secure means of communications.

(6) **Emplace Obstacles and Mines.** To save time and resources in preparing the defense, defenders must emphasize using all available materials (to include automobiles, railcars, and rubble) to create obstacles. Civilian construction equipment and materials must be located and inventoried. This equipment can be used with engineer assets or in place of damaged equipment. Coordination must be made with proper civilian officials before use, which is normally a brigade or battalion staff responsibility. Engineers must be able to provide advice and resources as to the employment of obstacles and mines.

(7) **Establish and Mark Routes between Positions.** Reconnaissance by all defending elements assists in route selection for use by defenders moving between positions. Movement is crucial to fighting in built-up areas. Early selection and marking of routes adds to the defender's advantages.

f. **Civil Considerations.** International law and moral imperatives require leaders to consider the effects of operations on the civilian population. The company commander must also consider cultural, economic, and political boundaries as they may have a direct impact on the range of tactical options available to him.

(1) Commanders may be precluded from countermobility operations directed at economically important roads, railways, and bridges. They must consider civilian movement when emplacing minefields. Commanders implement restrictive fire control measures consistent with ROE.

(2) Units with large civilian populations in their AO often must conduct support operations while preparing a defense. When Army forces must damage areas that are important to civilians, they ensure that civilian leaders and populations understand why these actions are necessary.

g. **Fire Hazards.** The defender's detailed knowledge of the terrain permits him to avoid areas that are likely to be fire hazards. All urban areas are vulnerable to fire, especially those with many wooden buildings. The defender must be prepared to fight a fire as he fights the enemy. The defender may deliberately set fires--

- To disrupt and disorganize the attackers.
- To canalize the attackers into more favorable antiarmor engagement areas.

6-11. COMMAND AND CONTROL

In all defensive situations, the antiarmor leader should position well forward so that he can control the action. Regardless of the utility of FBCB2 (if available), the leader must see and feel the battlefield. In urban terrain, this is even more critical due to obstacles, poor visibility, difficulty in communication, and intense fighting.

a. **Graphic Control Measures.** The use of graphic control measures and understanding the commander's intent two levels up by all leaders become even more important to mission accomplishment in an urban environment. Phase lines can be used to report the enemy's location or to control the advance of counterattacking units. Principal streets, rivers, and railroad lines are suitable phase lines. They should be clearly and uniformly marked on the near or far side of the street or open area. Checkpoints aid to report friendly locations and control movement. Contact points are used to designate specific points where friendly units make physical contact and pass information. TRPs can facilitate fire control. These and other control measures ensure coordination throughout the chain of command.

b. **Command Posts.** A unit's command post requires all-round security. Since each CP may have to secure itself, it should be near the reserve unit for added security. When collocated with another unit, however, CPs may not need to provide their own security. A simplified organization for CPs is required for ease of movement. Alternate CP locations and routes to them also must be identified.

c. **Actions on Contact.** When enemy forces enter and maneuver to seize initial objectives, the defender should employ all available fires to destroy or to suppress the direct-fire weapons that support the enemy's ground attack. Enemy tanks and armored vehicles should be engaged as soon as they come within the effective range of antiarmor weapon systems. As the enemy attack develops, the actions of small-unit leaders assume increased importance. Antiarmor squad and section leaders are often responsible for fighting independent battles. Thus, it is important that all leaders understand the commander's defensive concept and intent (two levels up). Counterattacks should be employed to destroy the enemy in the main battle area.

d. **Counterattacks.** Small infantry-heavy reserves supported by antiarmor elements should be prepared to counterattack to regain key positions, to block enemy penetrations, to provide flank protection, and to assist the disengagement and withdrawal of endangered units. It is especially important for enemy footholds to be repelled. When the reserves counterattack to reinforce a unit, they can be attached to the unit in whose sector the counterattack is taking place; otherwise, the counterattack force becomes the main effort. This makes coordination easier, especially if the counterattack goes through the unit's positions.

e. **Defense During Limited Visibility.** Commanders can expect the attacker to use limited visibility conditions to conduct necessary operations to sustain or gain daylight momentum.

(1) Commanders (or platoon leaders) should employ the following measures to defend against attacks during limited visibility.

(a) Defensive positions should be shifted from an alternate position or a hasty security position just before dark to deceive the enemy as to the exact location of the primary position.

(b) Unoccupied areas between units, which can be covered by observed fire during daylight, may have to be occupied, blocked, or patrolled during limited visibility. Early warning devices need to be installed.

(c) Radar, remote sensors, and night observation devices should be emplaced to cover streets and open areas.

(d) Noise-making devices, tanglefoot tactical wire, and observation posts should be positioned on all avenues of approach for early warning and to detect infiltration.

(e) Artificial illumination should be planned, to include the use of street lamps, stadium lights, pyrotechnics, and so forth.

(f) Indirect fire weapons, grenade launchers (M203), and hand grenades should be used when defenses are probed to avoid disclosure of key weapon systems in defensive positions.

(2) When the enemy begins his assault, FPFs should be initiated by a planned signal. Antiarmor weapon systems, crew-served weapons, armored vehicle-mounted weapons (if available), and individual riflemen fire within their assigned sectors. Grenades and command-detonated mines should supplement other fires as the enemy approaches the positions.

(3) Defenders should move to daylight positions before BMNT. To facilitate movement, buildings should be marked from the friendly side IAW unit SOP.

f. **Communications Restrictions.** FM radio (or digital) communications are initially the primary means of communication for controlling the defense of a built-up area and for enforcing security. Structures and a high concentration of electrical power lines may degrade FM radio (or digital) communication in built-up areas. Wire should be emplaced and used for communications as time permits. However, wire can be compromised if interdicted by the enemy. Messengers can be used as another means of communication. Visual signals can also be used but often are not effective because of the screening effects of buildings and walls. Increased battle noise makes the effective use of sound signals difficult. Signals must be planned, widely disseminated, and understood by all assigned and attached units

6-12. HASTY DEFENSE

A very likely defensive mission for an antiarmor company in urban terrain is to conduct a hasty defense. This mission is characterized by reduced time for the preparation of the defense. All of the troop-leading procedures are the same. The priorities of work are basically the same, but many take place concurrently. Units are deployed, weapons emplaced, and positions prepared in accordance with the factors of METT-TC, especially the amount of time the antiarmor company commander has available.

a. **Occupation and Preparation of Positions.** Preparations for the hasty defense vary with the time available. The preparations described below generally take two to four hours. In a hasty defense, the primary effort is to camouflage and conceal the presence of the hasty fighting positions and provide as much protection as possible for the antiarmor elements manning them. The emphasis on fortifying positions and making major alterations to the environment is reduced. These actions occur after security has been established.

(1) **Emplace Barriers and Obstacles.** Lack of time means two belts of barriers and obstacles are established and they are not as extensive as in a defense that permits more

time. Cover all obstacles with observation and fires. Walk the positions from the enemy side.

(2) **Rehearsals.** Conduct rehearsals with leaders and soldiers concerning such things as the orientation of the defense, unit positions, location of antiarmor weapon systems, counterattack plans, and withdrawal plan.

(3) **Movement Enhancement.** There will not be much time to improve movement within the defense. Priority should be given to removing obstructions along routes to alternate positions and to the counterattack route.

(4) **Communications.** Check communications. Communications are primarily FM radio (or digital). Plans should be made, and routes improved, for messengers. If time is available, wire is emplaced as an improvement to the defense.

b. **Improving the Defense.** As time permits, the following areas can be considered and prioritized in accordance with an analysis of the factors of METT-TC:

- Rest plan.
- Barrier and obstacle improvement.
- Improvement of primary and alternate positions.
- Preparation of supplementary positions.
- Additional movement enhancement efforts.
- Improvement of camouflage.
- Continued rehearsals for counterattack and withdrawal.
- Antiarmor and infantry integration

6-13. COMPANY DEFENSE OF A VILLAGE

A village is characterized as a built-up area surrounded by other types of terrain. Normally, an antiarmor company (or platoon) will defend a village as part of a larger force, establishing battle positions and strongpoints with the infantry units defending from key or decisive terrain. Defending on the leading edge of a village with TOWs, MK19s, and M2s, an antiarmor company can take advantage of longer-range observation and fields of fire. Here the company is more effective against an armor-heavy force. Defending in depth within the village with M2s and MK19s, the antiarmor company can deny the enemy a foothold. Here the company is more effective against a primarily infantry-heavy force. The decision as to which defense to employ is based on a thorough analysis of the factors of METT-TC. Because defending a village usually includes the defense of a built-up area surrounded by open terrain, the antiarmor company may need to coordinate with adjacent units to plan for the defense or control of this terrain.

a. **Influencing Factors.** Several factors influence the commander's decision. First, he must know the type of enemy against which his company will defend. If the threat is armored or motorized infantry, the greatest danger is that massive direct fire will destroy the antiarmor company's defensive positions. The company commander also must consider the terrain forward and to the flanks of the village from which the enemy can direct fires against his positions.

b. **Antiarmor Units under OPCON to Infantry Companies.** The infantry company commander could place the antiarmor platoon (or section) along the leading edge of a village where Javelins can compliment the antiarmor unit's direct fires. The antiarmor leader should select exact firing positions for his unit and should recommend engagement areas to the infantry company commander. If faced by enemy infantry, the

antiarmor unit (with M2 and MK19 mounted) moves to alternate positions with the protection of the infantry. These alternate positions allow the antiarmor unit to engage to the front as well as the flanks with as little movement as possible. Positions can be selected within buildings, and mouse holes can be constructed. After they are withdrawn from the leading edge of the village, the antiarmor unit also can provide a mobile reserve for the company.

c. **Company Trains.** The commander identifies a forward area where he can position his unit trains. He chooses a location near the main avenue of approach to ease resupply, recovery, and maintenance operations.

d. **Final Protective Fires.** FPFs are planned to address the biggest threat to the antiarmor unit--the enemy's infantry. When firing an FPF inside a built-up area is required, the battalion mortars are more effective than artillery because of the mortar's higher angle of fall. This higher angle gives the mortars a greater chance of impacting on the street.

e. **Combat Service Support.** Ammunition expenditure usually is high when fighting in a built-up area. To avoid moving around the village with ammunition resupply during the battle, the commander directs that ammunition be stockpiled in each occupied antiarmor unit position. He also orders units to stockpile firefighting equipment, drinking water, food, and first-aid supplies at each position.

f. **Communications.** To ensure adequate and continuous communications, redundant verbal and nonverbal communications are planned and checked. The antiarmor leader develops a plan for pyrotechnic signals. Backup wire should be laid in case vehicles, fires, or the enemy cut primary lines. The antiarmor leader also plans for the use of messengers throughout the village.

6-14. DEFENSE OF A BLOCK OR GROUP OF BUILDINGS

An antiarmor company (or platoon) normally conducts a defense of a city block or group of buildings as part of a larger force conducting a sector defense in a built-up area. Company commanders may assign their platoons strongpoints, battle positions, sectors, or any combination of these. A company operating in urban terrain may have to defend a city block or group of buildings in a core periphery or residential area. The antiarmor company (or platoon) conducts this operation in accordance with the commander's defensive scheme of maneuver. The operation should be coordinated with the action of security forces that are charged with delaying to the front of the company's position. The defense should take advantage of the protection of buildings that dominate the avenues of approach into the main battle area. This mission differs from defense of a village in that it is more likely to be conducted completely on urban terrain without the surrounding open terrain that characterizes the defense of a village.

a. **Task and Purpose.** A well-organized company defense in a built-up area--

- Stops the attack of the enemy on streets and city blocks by using obstacles and fire.
- Destroys the enemy by ambush and antiarmor direct fires from prepared positions.
- Remains in place for a counterattack.

b. **Reconnaissance and Security.** The execution of the mission will be more effective if leaders reconnoiter the terrain. Attached infantry should be given the mission

to man observation posts to provide reports concerning the size, activity, location, direction and rate of movement, and type of enemy assaulting the higher unit's sector or battle position.

c. **Task Organization.** As with other operations, an analysis of the factors of METT-TC may determine how the antiarmor company (or platoon) is task-organized and integrated into the battle to accomplish the mission.

d. **Execution.** A defending antiarmor unit should prepare a strong defense, cover obstacles, and ambush on the avenues of approach. A counterattacking antiarmor unit should be near the front of the higher unit's sector in covered and concealed positions with an on-order mission to counterattack. Rehearsals should be conducted both day and night. Counterattack forces also should have specific instructions of what their actions will be after the enemy assault has been repelled (for example, remain in sector or revert back to reserve status).

6-15. DEFENSE OF KEY TERRAIN

An antiarmor company (or platoon) defends key terrain independently or as part of a larger unit. It can form a perimeter defense around key terrain, government center, or command and control facility, for example. The antiarmor unit can establish and operate checkpoints and roadblocks in conjunction with this defense. In many cases, an unclear enemy situation and extremely restrictive ROE may characterize this mission. Often the facilities previously described are sited for their central location and convenience rather than for the defensibility of the terrain. The company commander (or platoon leader) often finds his unit must defend a piece of terrain that he would rather not have to occupy. A thorough analysis of the factors of METT-TC should determine how to defend the terrain.

a. **Task Organization.** Again, an analysis of the factors of METT-TC will determine the task organization of the antiarmor company. Figure 6-8, page 6-30, depicts a task-organized company defending an objective (a water purification plant). Additional assets will be given to a commander as they are requested or assigned, based on mission requirements and availability.

b. **Tasks.** The company commander will need to make a careful mission analysis in order to determine the specified and implied tasks associated with a mission of this type. In the situation shown in Figure 6-8, page 6-30, the company commander has determined that in order to defend the key terrain properly, he needs to deploy platoons on the defensible terrain available. Therefore, he defends urban terrain (left) with an infantry rifle platoon, high ground (top) overlooking a large open area with the antiarmor platoon, and low vegetated terrain (right, bottom) with infantry rifle platoons with antiarmor sections attached. Additionally, some of the tasks listed below may be necessary:

- Provide inner and outer security patrols.
- Establish OPs.
- Establish checkpoints and roadblocks.
- Conduct civilian control and evacuation.
- Conduct coordination with local authorities.
- Prevent collateral damage.
- Supervise specific functions associated with operation of the facility, such as water purification tests or site inspections.

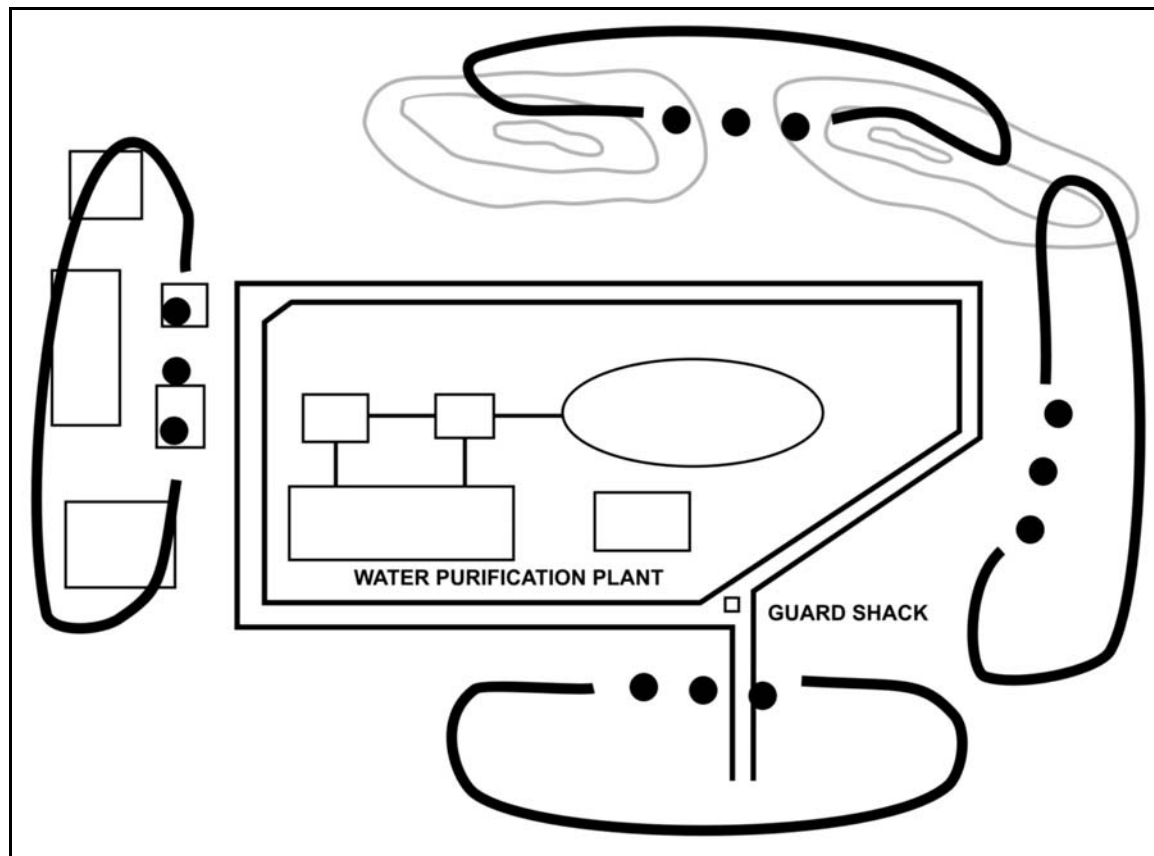


Figure 6-8. Perimeter defense of key terrain.

c. **Execution.** The company commander normally deploys platoons in a perimeter to dominate the key terrain and cover the mounted and dismounted avenues of approach into it. (See FM 7-10 for further information on perimeter defense.) Dismounted infantry and antiarmor elements are emplaced to cover the dismounted and mounted avenues of approach into the objective, respectively. Wire obstacles normally are used to restrict and deny. Key terrain should be covered by fire and rigged with detection devices and trip flares. Antiarmor and command-detonated antitank mines are used, consistent with the ROE. The company must be prepared to defend against a direct attack such as a raid or sabotage against facilities within the key terrain (water filtration system, pump station, and so forth). The commander must make an assessment as to the overall importance of the facilities within the key terrain and prioritize security requirements. Antiarmor elements are positioned to engage vehicle targets. The type of threat will determine the type of antiarmor weapon system to be employed.

d. **Other Considerations.** Depending on the mission requirements and threat, the company commander may have to consider the need for the following:

- Artillery and attack helicopter support.
- Air defense assets to defend against air attack.
- Engineer assets to construct obstacles.
- Interpreters to assist in the functioning of the facility and operation of the equipment.

- Military Police, civil affairs, and psychological operations (PSYOP) assets for civilian control and liaison.
- Coordination with local police and authorities.
- A mobile reserve or reaction force.

e. **Force Protection.** The antiarmor or infantry company may be required to conduct a perimeter defense, such as defending a friendly base camp on urban terrain, as part of a force protection mission. The same techniques of establishing a perimeter defense described above (and in FM 7-10) are used. The company maintains the appropriate level of security (for example, 100 percent, 50 percent, or 30 percent), consistent with the commander's plan and the enemy situation. Additional tasks may include--

- Establish roadblocks and checkpoints.
- Search individuals and vehicles before they enter the camp.
- Maintain a presence as a show of force to the civilian population outside the base camp.
- Conduct inner and outer security patrols.
- Clear urban terrain of any enemy that overwatches the base camp.
- Conduct ambushes to interdict any enemy forces moving toward the base camp.
- Restrict access to locations within the base camp and conduct surveillance of these locations from (or from within) adjacent structures or positions.
- Conduct reaction force duties inside and outside the perimeter of the camp.